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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,939	10/29/1999	MICHEL AUTHIER	89003-44	6547
28291 7590 11/30/2007 FETHERSTONHAUGH - SMART & BIGGAR 1000 DE LA GAUCHETIERE WEST SUITE 3300 MONTREAL, QC H3B 4W5 CANADA			EXAMINER FETSUGA, ROBERT M	
			ART UNIT 3751	PAPER NUMBER
			MAIL DATE 11/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/429,939

Applicant(s)

AUTHIER ET AL.

Examiner

Robert M. Fetsuga

Art Unit

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-45, 48, 50-54, 57, 59 and 67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42-45, 48, 50-54, 57, 59 and 67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/29/1999 & 05/30/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "programmed" feature set forth in claims 42-45, 50-54, 59 and 67 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. Claims 42-45, 48, 50-54, 57, 59 and 67 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 42 recites a controller programmed to "repetitively cause the at least one pump of the spa to run for a certain time period." Claims 51 and 67 recite similar subject matter. Implementation of this subject matter is neither taught by the instant disclosure nor evident to the examiner. The repetitive operation of the pump for pre-set periods, as argued and claimed, is not reconcilable with the instant disclosure. In both the disclosed prior art of Fig. 1 and applicant's invention of Fig. 3, sensor 3 sends a low temperature threshold signal causing the heater 9 and pump 13 to operate until the spa water temperature is raised above the low threshold. See page 2, lines 4-16, and page 4, lines 10-23, of the instant specification, as well as original claim 1. The instant disclosure provides no logic flow ("programmed") concerning how

sensor 17 could also "repetitively" (disclosed as a pre-set frequency, pg. 6) cause the heater and pump to run while sensor 3 is either already causing them to operate, or has turned them off upon exceeding the low temperature threshold. While it is conceivable the low temperature threshold of sensor 3 could be set below the low temperature threshold of sensor 17 (40 deg. F), the remaining "rate of purge data elements" based on lower temperatures (e.g. claim 43) would never be reached since sensors 3/17 would have circulated and heated the water to a safe temperature.

3. Claims 44 and 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite "applying a correction factor to said signal". The metes and bounds of this recitation is not ascertainable. The instant disclosure indicates merely that a second set of pre-determined values are used in the embodiment of Fig. 3. No methodology is disclosed pointing out how the temperature sensor signal has had a step of "applying" performed thereon.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 42-45, 51-54 and 67, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins et al. '720 and Lively.

The Tompkins et al. '720 (Tompkins) reference discloses a system comprising: a temperature sensor 20/21; a programmed (col. 2 lns. 62-67) controller 12,14; a tub 11; a water heater 26; and piping 35 including a pump 24. Re claim 42, the controller is programmed for processing a freeze condition (col. 18 ln. 66 thru col. 19 ln. 12). Re claims 42-45, the controller also associates a signal from the temperature sensor with a "rate of purge data element" as discussed at column 17, lines

47-55, and column 20, lines 54-62. Here, the controller selects a stored or pre-set time period for the pump and heater to run in achieving a desired water temperature based upon an initial water temperature. Moreover, the controller can be programmed for causing the pump and heater to run repetitively (col. 8 lns. 25-32). Therefore, Tompkins teaches all claimed elements except for the provision of an ambient air temperature sensor.

Although the programmed controller of the Tompkins spa system does not include an ambient air temperature sensor, as claimed, attention is directed to the Lively reference which discloses an analogous system which further includes a programmed (col. 8 lns. 32-41) controller (Fig. 3) having an ambient air (col. 6 lns. 41-52) temperature sensor 110,111. Therefore, in consideration of Lively, it would have been obvious to one of ordinary skill in the spa system art to associate an ambient air temperature sensor with the Tompkins programmed controller in order to protect against a damaging air temperature.

Applicant argues at pages 11-15 of the response filed October 31, 2007 Tompkins does not teach repetitively causing a pump to be activated. The examiner disagrees. Tompkins clearly teaches repetitively causing a pump to be activated as is

evident from consideration of lines 25-32 in column 8 (also reproduced by applicant at page 11). The "once a day" feature in Tompkins meets the term "repetitively" as recited in the claims. Applicant argues at pages 15-18 and 20-23 of the response Tompkins does not teach deriving a "rate of purge data element". The examiner disagrees. As noted supra, the Tompkins controller calculates a time period necessary to heat spa water to a desired temperature (based upon a signal from the temperature sensor), stores that time period for future use, and then (repetitively) causes the heater and pump to run for that time period to heat the spa water. Whether the sensor signal is generated by the water temperature as in Tompkins, or by an ambient air temperature as taught by Lively, would not affect the ability of the Tompkins controller to perform the disclosed functions. Indeed, Tompkins was aware of the danger associated with low ambient air temperatures (col. 19 lns. 13-18).

6. Claims 48 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins and Lively as applied to claims 42 and 51 above, and further in view of Janosko.

Although the temperature sensor of the Tompkins spa system is not inside the controller, as claimed, attention is directed to the Janosko reference which discloses an analogous spa system

which further includes a temperature sensor 199 inside a controller 196. Therefore, in consideration of Janosko, it would have been obvious to one of ordinary skill in the spa system art to associate controller mounting with the Tompkins temperature sensor in order to reduce installation/manufacturing cost.

Applicant has not substantively argued this ground of rejection beyond noting the subject matter of the independent claims.

7. Claims 50 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins and Lively as applied to claims 42 and 51 above, and further in view of Dundas.

The Tompkins system further comprises a blower 28.

Dundas teaches it is common to operate a blower 19 during freezing conditions (col. 4 lns. 22-25). To automate the blower operation taught by Dundas with the controller taught by Tompkins would have been obvious in order to enhance freeze protection.

Applicant has not substantively argued this ground of rejection beyond noting the subject matter of the independent claims.

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8. Applicant is referred to MPEP 714.02 and 608.01(o) in responding to this Office action.

9. Any inquiry concerning this communication should be directed to Robert M. Fetsuga at telephone number 571/272-4886 who can be most easily reached Monday through Thursday. The Office central fax number is 571/273-8300.

A handwritten signature in black ink, appearing to read 'Robert M. Fetsuga', with a stylized flourish at the end.

Robert M. Fetsuga
Primary Examiner
Art Unit 3751